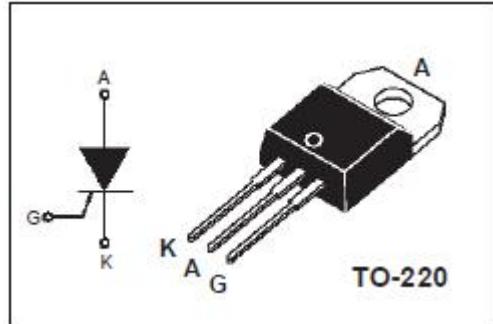


isc Thyristors

C122D

APPLICATIONS

- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	400	V
V_{RRM}	Repetitive peak reverse voltage	400	V
$I_{T(RMS)}$	RMS on-state current	8	A
I_{TSM}	Surge non-repetitive on-state current @60Hz	90	A
$P_{G(AV)}$	Average gate power dissipation	0.5	W
T_j	Operating junction temperature	-40~100	$^\circ\text{C}$
T_{stg}	Storage temperature	-40~125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$	$T_j=25^\circ\text{C}$	0.1	mA
			$T_j=100^\circ\text{C}$	0.5	
I_{DRM}	Repetitive peak off-state current	$V_{DM}=V_{DRM}$	$T_j=25^\circ\text{C}$	0.1	mA
			$T_j=100^\circ\text{C}$	0.5	
V_{TM}	On-state voltage	$I_{TM}= 16\text{A}; T_c=25^\circ\text{C}$		1.83	V
I_{GT}	Gate-trigger current	$V_D = 6\text{V}; R_L=91\ \Omega; T_c=25^\circ\text{C}$		25	mA
V_{GT}	Gate-trigger voltage	$V_D = 6\text{V}; R_L=91\ \Omega; T_c=25^\circ\text{C}$		1.5	V
$R_{th(j-c)}$	Thermal resistance	Junction to case		1.8	$^\circ\text{C}/\text{W}$